UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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ART UNIT	PAPER NUMBER
2178	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

		Application No.	Applicant(s)
Office Action Summary		09/768,869	KARADIMITRIOU ET AL.
		Examiner	Art Unit	
		Adam L. Basehoar	2178	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE _3_ MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on _22 June 2007_.

2a)☒ This action is **FINAL.**   2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle,* 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) _1-22_ is/are pending in the application.

　　4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) _1-22_ is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

　　Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

　　Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

　　a)☐ All　b)☐ Some * c)☐ None of:

　　　1.☐ Certified copies of the priority documents have been received.

　　　2.☐ Certified copies of the priority documents have been received in Application No. _____.

　　　3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

　　* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☐ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO/SB/08)
　　Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)
　　Paper No(s)/Mail Date. _____.

5)☐ Notice of Informal Patent Application

6)☐ Other: _____.

DETAILED ACTION

1.   This action is responsive to communications: The Amendment filed 06/22/07.

2.   Claims 1-3, 6-12, 15-22 remain rejected under 35 U.S.C. 103(a) as being

unpatentable over Russell-Falla et al (US-6,675,162 01/06/04) in view of Chakrabarti et

al (US-6,389,436 05/14/02) in further view of Shmueli et al (US-6,442,555 08/27/02).

3.   Claim 4-5 and 13-14 remain rejected under 35 U.S.C. 103(a) as being

unpatentable over Russell-Falla et al (US: 6,675,162 01/06/04) in view of Chakrabarti et

al (US-6,389,436 05/14/02) in view of Shmueli et al (US-6,442,555 08/27/02). in further

view of Haug et al (US: 6,556,964 04/29/03).

4.   Claims 1-22 are pending in the case. Claims 1 and 10 are independent claims.

Claim Rejections - 35 USC § 103

5.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set
> forth in section 102 of this title, if the differences between the subject matter sought to be patented and
> the prior art are such that the subject matter as a whole would have been obvious at the time the
> invention was made to a person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was made.

6.   Claims 1-3, 6-12, 15-22 are rejected under 35 U.S.C. 103(a) as being unpatentable

over Russell-Falla et al (US-6,675,162 01/06/04) in view of Chakrabarti et al (US-

6,389,436 05/14/02) in further view of Shmueli et al (US-6,442,555 08/27/02).

-In regard to independent claims 1 and 10, Russell-Falla et al teach a method

and apparatus for determining content type of a web page comprising:

providing a predefined set of potential content types exclusive of indicating

formal language of the content (categories of content)(column 2, lines 35-43);

for each potential content type (categories of content)(column 2, lines 35-43)(e.g. "pornographic", "racist", etc)(column 3, lines 39-43), preparing a distinguishing series of binary tests (column 2, lines 56-63; column 3, lines 39-57; column 4, lines 61-66)(i.e. testing each keyword or regular expression of the content against a database of keywords and regular expressions common to the content type for matching and weighting purposes), wherein at least one test determines whether a predefined piece of data or keyword appears in URLs (column 2, lines 5-9) of the subject Web page (column 2, lines 56-63; column 3, lines 23-57, column 4, lines 61-66: i.e. testing all of a web pages textual content which as appreciated by one skilled in the art would include the text in the URLs of the selected web page);

for each potential content type (categories of content)(column 2, lines 35-43)(e.g. "pornographic", "racist", etc)(column 3, lines 39-43), running the distinguishing series of tests (column 2, lines 56-63; column 3, lines 39-57; column 4, lines 61-66)(i.e. testing each keyword or regular expression against a database of keywords and regular expressions common to the content type for matching and weighting purposes) enabling quantitative evaluation of some contents of the selected web page being of the potential content type (column 2, lines 55-64);

mathematically combining the test results (column 3, lines 54-57); and

based on the results, assigning a probability (equivalent to the final rating of the page relative to the content category), for each potential content type, that shows the likelihood that some contents of that type exist on the selected web page exclusive of indicating the language in which the content was written (column 3, lines 2-6).

Russell-Falla et al do not teach wherein the distinguishing series of tests includes at least one or more non-binary tests. Chakrabarti et al teach a distinguishing series of tests to determine the potential content type of a web page (column 4, lines 5-15), wherein the distinguishing series of tests include non-binary tests (i.e. the test results in more than two possible outcomes)(column 6, lines 27-67; column 7, lines 1-4). It would have been obvious to one of ordinary skill in the art at the time of the invention for Russell-Falla et al to have run the additional non-binary tests as taught in Chakrabarti et al for determining the content type of web pages, because Chakrabarti et al teach that by utilizing in/out links of the web page with the hypertext classifier (Fig. 1: 110) the accuracy of classification goes up over those tests utilizing only local text/terms of the document to be classified (column 7, lines 34-59).

Russell-Falla et al and Chakrabarti et al do not specifically teach wherein the binary test and non-binary test further include a test for classifying the content type based on examining page format or style other than position of data or keyword in the subject web page. Shmueli et al teaches a method for classifying a new document as a particular type based on determining the format information within each portion of the document, wherein the format information includes font, font size, and justification (column 1, lines 28-47: "font, font size, and justification"). It would have been obvious to one of ordinary skill in the art at the time of the invention for one of the distinguishing series of tests of Russell-Falla and Chakrabarti et al to have analyzed the page format or style of the document web page as shown in Shmueli et al, because Shmueli et al teach that by utilizing a more robust document decomposition that looked specifically at document

format, a document could be automatically recognized and classified (column 1, lines 28-47; column 2, lines 13-17).

-In regard to dependent claims 2, 11, and 15, Russell-Falla et al further teach wherein the set of potential content types could include web page articles/news with information about people (e.g. pornography, racism, terrorism) and other content (column 2, lines 10-23; column 3, lines 41-43).

-In regard to dependent claims 3 and 12, Russell-Falla et al further teach producing a respective confidence level (equivalent to the rating of the page relative to the content category) for each potential content type when at least some of the web page content was of that type (columns 2 & 3, lines 54-67 & 1-6).

-In regard to dependent claims 6 and 16, Russell-Falla et al further teach wherein the step of running the tests includes determining whether a predefined piece of data or keyword ("weighting list") appears in the web page (column 2, lines 56-63).

-In regard to dependent claims 7 and 17, Russell-Falla et al further teach wherein the step of running the tests includes determining whether a predefined piece of data or keyword ("weighting list") appears in the web page (column 2, lines 56-63).

-In regard to dependent claims 8, 9, and 18, Russell-Falla et al do not teach storing indications of the assigned probabilities (web page ratings) of each potential

content type cross referenced with each respective web page in a database. It would have

been obvious to one of ordinary skill in the art at the time of the invention to have stored

previously viewed web pages along with there respective ratings for content types local

to the user, because it was well known in the art at the time of the invention that storing

frequently view web pages with their ratings would significantly reduce the

determination/processing time of the Russell-Falla et al system by eliminating undue

identifying, analyzing, and calculating on identical web page requests. Thus a repeated

request could render an appropriate web page more efficiently which would benefit

Russell-Falla et al which teach that analyzing web pages could be difficult and time

consuming (column 1, 38-43).

-In regard to dependent claims 19 and 20, Russell-Falla et al teaches wherein

one of tests was determining the number of phrases that contain the keyword (column 2,

lines 56-63; column 3, lines 39-57; column 4, lines 61-67; column 5, lines 1-22: i.e. the

number of keywords from the selected web page that have a corresponding entry in the

pre-existing database are placed in a weighted list and then summed together to

determine a rating to be compared to a given threshold).

-In regard to dependent claims 21 and 22, Russell-Falla teaches in view of the

Shmueli et al reference wherein one test included examining page format or style other

than position of data. Because a test for examining syntax or grammar was listed in the

alternative the limitations of these claims do not further limit their parent claims via the

path selected by the Examiner and are thus not considered.

7.   Claim 4-5 and 13-14 are rejected under 35 U.S.C. 103(a) as being unpatentable

over Russell-Falla et al (US: 6,675,162 01/06/04) in view of Chakrabarti et al (US-

6,389,436 05/14/02) in view of Shmueli et al (US-6,442,555 08/27/02). in further view of

Haug et al (US: 6,556,964 04/29/03).

        -In regard to dependent claims 4 and 13, Russell-Falla et al further teach

wherein the test results utilize a neural network (column 4, lines 1-5). Russell-Falla et al

do not teach wherein the combining of the test results includes using a Bayesian network.

Haug et al teach wherein the application of a Bayesian network for statistical pattern

recognition provides improved system performance with additional training of the

network (column 3, lines 8-16). It would have been obvious to one of ordinary skill in

the art at the time of the invention, for the invention of Russell-Falla et al to have

employed a Bayesian network as shown in Haug et al, to achieve the above mentioned

improved system performance, because Russell-Falla et al do provide the needed training

of the network (column 3, lines 58-67) which would be needed to increase the statistical

recognition needed to support the Bayesian network.

        -In regard to dependent claims 5 and 14, Russell-Falla et al further teach the

step of training the neural network using a training set of web pages with respective

known content types and collecting the statistics on the test results of the training web

pages (column 3, lines 58-67).

Response to Arguments

8.   Applicant's arguments filed 06/22/07 have been fully considered but they are not

persuasive.

-In response to applicant's argument that there is no suggestion to combine the

references (i.e. The Russell-Falla and Shmueli references), the examiner recognizes that

obviousness can only be established by combining or modifying the teachings of the prior

art to produce the claimed invention where there is some teaching, suggestion, or

motivation to do so found either in the references themselves or in the knowledge

generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5

USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed.

Cir. 1992). In this case, Russell-Falla teaches a method/system for categorizing a

selected web page based on one or more selected categories of content. While the

preferred example embodiment of Russell-Falla was concerned with blocking web pages

that were categorized as being unsuitable or potentially harmful (e.g. pornographic,

racist, etc), Russell-Falla additionally taught alternative embodiments for categorizing

web pages for any other reason that one might want to identify particular web pages

based on their content (column 2, lines 44-49; column 4, lines 35-44). As discussed in

the rejection, the result of Russell-Falla's plurality of tests is a binary test that categorizes

a given web page in relation to a selected content category.

Russell-Falla does not teach wherein one of the plurality of tests was examining

the web page for format or style other than the position of data or a keyword in the web

page. Shmeuli et al cures this deficiency by teaching that it was notoriously well known

in the art at the time of the invention for document classifiers to recognize both size,

location, and organization of distinct portions of an electronic document as well as

determining format information of each portion of the electronic document to include, for

example, font, font size, and justification (column 1, lines 34-47). Thus Shmeuli teaches

another well known document classification method, which instead of analyzing the

natural language text of a given document, analyzes a documents format and style to

determine a documents content type. Therefore it would have been obvious to one of

ordinary skill in the art at the time of the invention for one of the distinguishing series of

tests of Russell-Falla and Chakrabarti et al to have analyzed the page format or style of

the document web page as shown in Shmueli et al, because Shmueli et al teach that by

utilizing a more robust document decomposition that looked specifically at document

format, a document could be automatically recognized and classified (column 1, lines 28-

47; column 2, lines 13-17).

The Applicant's arguments (Page 12) are unproven. Clearly one of ordinary skill

in the art at the time of the invention would have appreciated the use and cited benefits of

the plurality of well known techniques for classifying an electronic document as

disclosed in the Russell-Falla, Chakrabarti et al, and Shmeuli references. Furthermore,

Applicant's comments appear to contradict Applicant's own claimed invention that could

require a web document's format or style in order to determine the content type of a

subject web page. If as Applicant suggests, that an electronic document's format or style

"cannot provide any insight on the content type and hence category or classification of a

subject Web Page," then serious doubts are raised with regards to the independent claims.

The arguments with regards to the Chakrabarti reference are similar to those as

discussed above and are considered not persuasive based on the same rational.

Conclusion

9.   **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of

time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE

MONTHS from the mailing date of this action. In the event a first reply is filed within

TWO MONTHS of the mailing date of this final action and the advisory action is not

mailed until after the end of the THREE-MONTH shortened statutory period, then the

shortened statutory period will expire on the date the advisory action is mailed, and any

extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the

advisory action. In no event, however, will the statutory period for reply expire later than

SIX MONTHS from the mailing date of this final action.

10.   Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Adam L. Basehoar whose telephone number is (571)-272-

4121. The examiner can normally be reached on M-F: 7:00am - 4:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Steve Hong can be reached on (571) 272-4124. The fax phone number for

the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system. Status information for

published applications may be obtained from either Private PAIR or Public PAIR. Status

information for unpublished applications is available through Private PAIR only. For

more information about the PAIR system, see http://pair-direct.uspto.gov. Should you

have questions on access to the Private PAIR system, contact the Electronic Business

Center (EBC) at 866-217-9197 (toll-free).

ALB

STEPHEN HONG
SUPERVISORY PATENT EXAMINER